

# Alcohol Involvement Among Violent Deaths in Utah

## 2021



- Between 2016 and 2018, there were a total of 2,523 total violent deaths in Utah and 661 (26.2%) of these deaths involved alcohol among the decedents. (BAC > 0.0 g/dl).
- Among violent death decedents with a positive blood alcohol content, about three in four were intoxicated (BAC  $\geq$  0.08 g/dl).
- Among decedents with a positive BAC, suicide accounted for 81.7%, undetermined intent for 9.2%, homicide for 7.7%, and other (e.g., unintentional firearm, legal intervention) for 1.4% of the deaths.
- The highest age-specific rate of violent deaths involving alcohol (BAC > 0.0 g/dl) were among those between ages 40 and 49 years. Male violent death decedents were significantly younger than female decedents.
- Among the violent death decedents with a history of alcohol problems (n=448), 61.6% had a positive BAC and 56.3% had a BAC  $\geq$  0.08 g/dl compared with those without a recorded alcohol problem (n=2,075), of those 19.2% had a positive BAC and 14.1% had a BAC  $\geq$  0.08 g/dl (Figure 1).

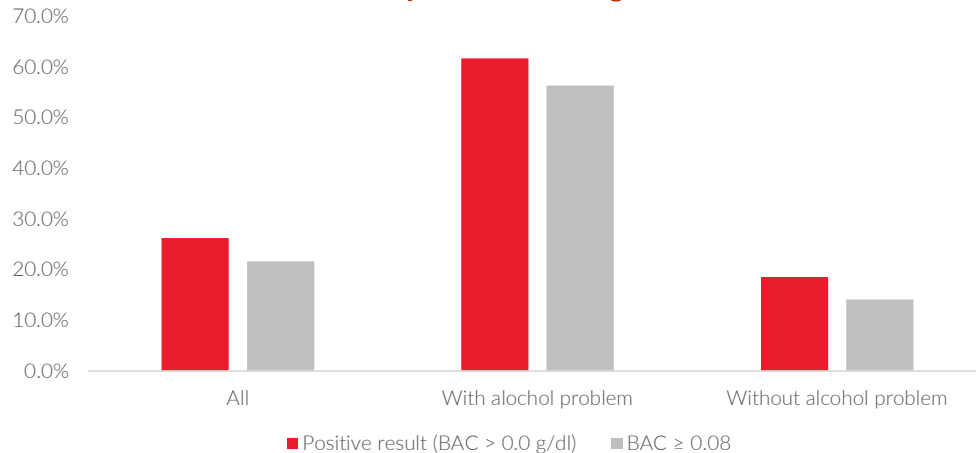
## Overview and Explanations

In Utah, from 2011-2015, excessive alcohol use was responsible for an average of about 700 deaths each year. Excessive alcohol use increases the risk of violence, including deaths by homicide and suicide<sup>1</sup>.

The National Violent Death Reporting System (NVDRS) is a state-based surveillance system that collects information on violent deaths, such as homicide and suicide. In Utah, data are linked from death certificates, medical examiner reports including toxicology reports, and law enforcement reports to assist in design and implementation of tailored violence prevention efforts in the state. NVDRS pools more than 600 unique data elements from multiple sources into a usable, anonymous database<sup>2</sup>.

Blood alcohol contents/concentration (BAC) is a measurement of alcohol intoxication. A BAC of 0.0 is considered sober, a positive BAC is any BAC > 0.0 g/dl, and 0.08 or above is considered legally intoxicated and impaired (**Figure 1**).

**Figure 1: Alcohol test results and alcohol problems among 661 violent deaths in Utah, 2016-2018**



## Utah vs. United States

Analysis of 57,813 victims in 16 states showed 24% of men and 17% of women were intoxicated at the time of death<sup>3</sup>. A study from 32 states estimates that among the violent deaths with a reported BAC, 41.1% had a positive BAC and 27.7% had a BAC ≥ 0.08 g/dL.<sup>4</sup>

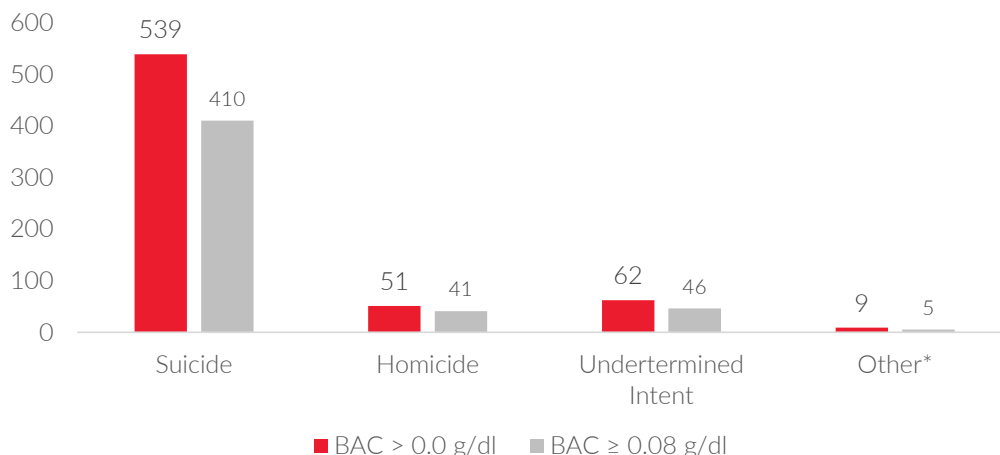
## Method

The 2016-2018 Utah VDRS data on victims' blood alcohol concentrations (BAC) (any positive BAC (>0.0 g/dl) or BAC (≥0.08 g/dl)), and recorded history of alcohol problems were analyzed. A person was coded as having a history of alcohol problems if they had a problem with controlling use of, or were addicted to, alcohol.

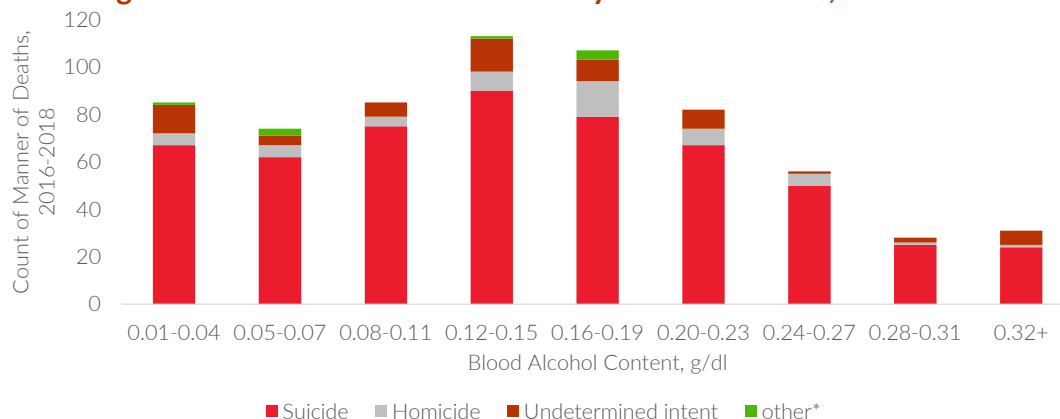
## Deaths by Intent

Among decedents with a positive BAC, suicide accounted for 81.7%, undetermined intent for 9.2%, homicide for 7.7%, and other (e.g., unintentional firearm, legal intervention) for 1.4% of the deaths (Figure 2). Approximately one third of all violent deaths with alcohol involved had a BAC level between 0.12 g/dl and 0.19 g/dl (Figure 3).

**Figure 2: Manner of deaths for violent deaths involving alcohol in Utah, 2016-2018**



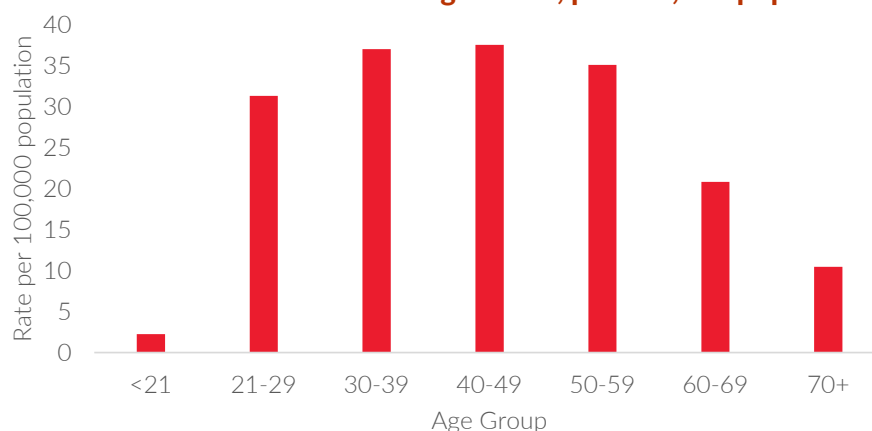
**Figure 3: Blood alcohol content level by manner of death, 2016-2018**



## Death Rates by Age and Sex

Among all violent deaths that involved alcohol, 79.5% of the victims were male. Approximately 60% of all violent death victims who had a positive BAC were between the ages of 18 and 44 years. The age-specific rate of violent deaths involving alcohol (BAC > 0.0 g/dl) were found to be highest among the 40-49 age group (38 per 100,000 population) and lowest among <21 age group (2 per 100,000 population) (Figure 4). Male violent death decedents were younger than female decedents. Males had an average age of 40.3 (95% CI: 39.0, 41.5) years compared to female decedents' average age of 44.8 (95% CI: 42.4, 47.2) years (p-value = 0.001).

**Figure 4: Age-specific rate of violent death involving alcohol, per 100,000 population, Utah, 2016-2018**



## Prevention Tips

### Ways you can prevent excessive drinking

- Choose not to drink too much alcohol yourself and help others avoid it.
- If you choose to drink alcohol, follow the U.S. Dietary Guidelines for Americans (no more than one drink per day for women and no more than two drinks per day for men).
- Support effective community strategies to prevent excessive alcohol use.
- Not provide alcohol to those who should not be drinking, including people under the age of 21 or those who have already drank too much.
- Talk with your healthcare provider about your drinking behavior and request counseling if you drink too much.<sup>5</sup>

### Ways parents of youth can prevent excessive drinking

- Parental disapproval is the #1 reason teens choose not to drink alcohol.
- Stay close to your children (express love daily, do fun activities together, eat dinner together, listen with love and empathy).
- Set clear boundaries (set clear “no alcohol: rules, establish consequences, follow through).
- Monitor your children (know where they are, who they are with, what they are doing).<sup>4</sup>

### Ways states and communities can prevent excessive drinking

- Implement effective prevention strategies for excessive alcohol use
  - Regulate of alcohol outlet density
  - Increase alcohol taxes
  - Dram shop liability
  - Maintain limits on days and hours of sale
  - Electronic screening and brief intervention (e-SBI)
  - Enhance enforcement of laws prohibiting sales to minors
  - Do not privatize retail alcohol sales
- Enforce existing laws and regulations about alcohol sales and service
- Develop community coalitions that build partnerships between schools, faith-based organizations, law enforcement, health care, and public health agencies to reduce excessive alcohol use
- Routinely monitor and report the prevalence, frequency, and intensity of binge drinking<sup>5</sup>

## What the VIPP is Doing to Address Alcohol Involvement in Violent Deaths?

### Community outreach/Coalition work

- Work with Parents Empowered to prevent and address underage drinking.
- Work with the Utah Prevention Advisory Council (UPAC) to reduce and eliminate the abuse of alcohol.

### Improve the Social Determinants of Health

- Improve access and utilization of health care.
- Improve the socioeconomic conditions for Utahns.
- Encourage social norms that promote safety and health.
- Enhance physical environments to improve safe and healthy living.
- Promote individual, family, and community connectedness.

## References

1. Excessive Alcohol Use: <https://www.cdc.gov/chronicdisease/resources/publications/factsheets/alcohol.htm>
2. National Violent Death Reporting System: <https://www.cdc.gov/violenceprevention/datasources/nvdrs/index.html>
3. Kaplan MS, McFarland BH, Huguet N, Conner K, Caetano R, et al.(2013) Acute alcohol intoxication and suicide: a gender-stratified analysis of the National Violent Death Reporting System. *Inj Prev* 19: 38-43
4. Naomi G, Laura ET, Mary EC, Elizabeth M, Marissa E. (2021) Alcohol testing and alcohol involvement among violent deaths by states, 2014-2016. *Preventive Medicine* 148 (2021) 106527.
5. Parents Empowered. <https://parentsempowered.org/>

## Data Notes

- Pooled 2016-2018 NVDRS data were used for the analysis.

## Fundraising Disclaimer

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### Our Mission:

VIPP is a trusted and comprehensive resource for data and technical assistance related to violence and injury. This information helps promote partnerships and programs to prevent injuries and improve public health.

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